

### CLAIMS

1. Device for sealing a receptacle provided with a threaded neck, this device comprising:

- a stopper (125) adapted to close said neck (101),

5 - an inner capsule (122) adapted to be glued to or sealed on the edge of said neck,

- a sealing disc (121) on which said inner capsule (122) is fixed, and projecting radially ( $D_{121}/D_{115}$ ) outside said neck (101), and

- a ring provided with an inner thread (341) adapted to cooperate with the  
10 outer thread (111) of said neck, said ring being fitted with at least one projection (344, 344', 344'') extending in the direction of said disc (121) and adapted to exert a pushing effort ( $F_3$ ) on said disc in a direction in which said disc is spaced in relation to said neck,  
characterized in that said projection (344, 344', 344'') extends, from an edge  
15 (345) of said ring (124), essentially in an axial direction (X-X').

2. Device according to Claim 1, characterized in that said stopper is a cap  
(125) adapted to cover said neck (101), said disc (121) being disposed in the vicinity of the inner face (353) of the bottom (351) of said cap and maintained in place by said ring (124), itself fast in rotation with an annular skirt (352) of said  
20 cap.

3. Device according to Claim 2, characterized in that said ring (124) is provided, on its outer radial face (347), with elements in relief (346) adapted to come into engagement with elements in relief (354) of corresponding shape formed on the inner radial face (355) of said skirt (352).

4. Device according to one of the preceding Claims, characterized in that said projection (344, 344', 344'') forms an inclined ramp (344b) allowing a progressive application of said effort ( $F_3$ ), as a function of the rotation of said ring.

5 5. Receptacle for liquid, particularly bottle (B) made of plastics material, fitted with a sealing device (102) according to one of the preceding Claims.

6. Method for producing a sealing device for a receptacle provided with a threaded neck, in which are carried out steps consisting in:

10 a) manufacturing a ring (124) provided with an inner thread (341) adapted to cooperate with the outer thread (111) of said neck (101);

b) manufacturing a sealing disc (121);

characterized in that it comprises steps consisting in:

c) providing said ring, on its outer radial surface (347), with elements in relief (346);

15 d) providing said ring with at least one projection (344, 344', 344'') extending, from one edge (345) of said ring, essentially in an axial direction (X-X');

e) manufacturing a cap (125) adapted to cover said neck (101) and said ring (124) screwed on said neck;

20 f) providing said cap, on its inner radial surface (355), with elements in relief (354);

g) introducing said sealing disc (121) in said cap;

25 h) introducing said ring (124) in said cap (125), bringing the elements in relief (346, 354), respectively provided on the outer radial surface (347) of the ring and on the inner radial surface (355) of the cap, into engagement, by directing said projections (344, 344', 344'')

towards said disc and by blocking said disc in said cap thanks to said ring.

7. Method according to Claim 6, characterized in that steps c) and d) are carried out at the same time as step a) which is a step of moulding said ring (24).

8. Method according to one of Claims 6 or 7, characterized in that step f) is  
5 carried out at the same time as step e) which is a step of moulding said cap (125).

9. Method according to one of Claims 6 to 8, characterized in that, during steps a) to f), the ring (124), the cap (125), the disc (121) and the projection (344, 344, 344") are dimensioned and positioned so that said projection is  
10 adapted to separate ( $F_3$ ) said disc from said neck, while said device (102) is being unscrewed with respect to the neck (101).

10. Method for sealing a receptacle by means of a device manufactured in accordance with one of Claims 6 to 9, characterized in that it comprises a step of fixing said disc (121) on said neck (101), after said device (102) has been  
15 positioned on said neck, particularly by heat-sealing an inner capsule (122) borne by said disc on said neck.